

IN THE CLAIMS

This listing of claims replaces all prior listings and versions of the claims in the present application.

Listing of Claims:

Claims 1-8 (Canceled).

Claim 9 (Currently Amended): A stretchable transfer conveyer wherein a pair of guide rails respectively provided with guide surfaces for guiding both side surfaces of a transferred article in a transfer direction are extended in the transfer direction and wherein flexible endless belts for supporting lower surfaces at both sides of the transferred article, ~~whose~~ both side surfaces of which are guided along the guide surfaces, to transfer the transferred article in the transfer direction, are drivingly connected to a drive device and are carried along plural rotational members to be circulated, the conveyer comprising:

a stretching mechanism provided at one end of each of the guide rails to be stretchable in the transfer direction;

a stretchable guide surface provided at a facing surface of the stretching mechanism and formed into a flat surface continuous and even with the guide surface regardless of the stretched position of the stretching mechanism; and

plural rotational members provided on the facing surface of the stretching mechanism for circulatably supporting the endless belt.

Claim 10 (Previously Presented): The stretchable transfer conveyer as set forth in claim 9, wherein the stretching mechanism comprises:

an adjuster member mounted on an end of each guide rail to be movable in the transfer direction and provided with an adjuster guide surface being a flat surface even with the guide surface; and

a complementary member insertable into a space which is made between the guide surface of the guide rail and the adjuster guide surface of the adjuster member when the adjuster member is moved in the transfer direction, and provided with a complementary guide surface for forming the stretchable guide surface together with the adjuster guide surface.

Claim 11 (Previously Presented): The stretchable transfer conveyer as set forth in claim 10, wherein:

the complementary member is mounted on the end of the guide rail to be movable in a complementary direction intersecting with the transfer direction with the complementary guide surface defining a flat surface continuous and even with the guide surface; and

the adjuster member and the complementary member are joined at respective joint surfaces which are inclined relative to the transfer direction as well as to the complementary direction;

whereby the adjuster guide surface and the complementary guide surface are joined at the respective joint surfaces to define the stretchable guide surface as a continuous and even flat surface.

Claim 12 (Previously Presented): The stretchable transfer conveyer as set forth in claim 11, wherein:

the adjuster member has mounted thereon a first rotational member for winding therearound one end of a horizontally traveling portion of the endless belt and a second

rotational member for downwardly bending the endless belt run out from the first rotational member;

the complementary member has mounted thereon a third rotational member for horizontally bending the endless belt run out from the second rotational member and a fourth rotational member for roughly vertically bending the endless belt bent horizontally; and

the guide rail has mounted thereon a fifth rotational member for horizontally bending the endless belt run out from the fourth rotational member.

Claim 13 (Previously Presented): The stretchable transfer conveyer as set forth in claim 12, wherein:

the complementary direction is a vertical direction perpendicular to the transfer direction;

the adjuster member and the complementary member are joined at the joint surfaces which are inclined 45 degrees relative to the transfer direction;

the adjuster guide surface and the complementary guide surface are joined along the joint surfaces to constitute the stretchable guide surface;

the adjuster member has mounted thereon the first rotational member for winding therearound one end of the horizontally traveling portion of the endless belt and the second rotational member for downwardly bending the endless belt run out horizontally from the first rotational member;

the complementary member has mounted thereon the third rotational member for horizontally bending the endless belt run out from the second rotational member and the fourth rotational member for roughly vertically bending the endless belt bent horizontally;

the guide rail has mounted thereon the fifth rotational member for horizontally bending the endless belt run out from the fourth rotational member; and

the third rotational member is moved as being restrained by a guide vertically provided on the adjuster member and another guide horizontally provided on the complementary member.

Claim 14 (Previously Presented): The stretchable transfer conveyer as set forth in claim 9, further comprising:

a feed device for moving the adjuster member in the transfer direction; and  
means for moving the complementary member in the complementary direction in linkage relation with the movement of the adjuster member.

Claim 15 (Previously Presented): The stretchable transfer conveyer as set forth in claim 9, wherein the transferred article is a printed board or a board for mounting electronic components thereon.

Claim 16 (Currently Amended): A method of stretching a transfer conveyer wherein a pair of guide rails respectively provided with guide surfaces for guiding both side surfaces of a transferred article in a transfer direction are extended in the transfer direction and wherein flexible endless belts for supporting lower surfaces at both sides of the transferred article, ~~whose~~ both side surfaces of which are guided along the guide surfaces, to transfer the transferred article in the transfer direction, are drivingly connected to a drive device and are carried along plural rotational members to be recirculated, the method comprising:

mounting an adjuster member, which is provided with an adjuster guide surface being a flat surface even with the guide surface, on one end of each guide rail to be movable in the transfer direction;

providing a complementary member, which is provided with a complementary guide surface being a flat surface even with the guide surface, to be movable in the complementary direction intersecting with the transfer direction, with the guide surface and the complementary guide surface defining a continuous and even flat surface; and

joining the adjuster member and the complementary member at respective joint surfaces which are inclined relative to the transfer direction and the complementary direction so that a stretchable guide surface is formed by joining the adjuster guide surface and the complementary guide surface along the joint surfaces to define the continuous and even flat surface.

Claim 17 (Previously Presented): A stretchable guide device for a movable article comprising:

a pair of guide rails respectively provided with guide surfaces for guiding both side surfaces of the movable article in a moving direction;

an adjuster member mounted on one end of each of the guide rails to be movable in the moving direction of the movable article and provided with an adjuster guide surface which is a flat surface even with the guide surface; and

a complementary member insertable into a space which is made between the guide surface of the guide rail and the adjuster guide surface of the adjuster member when the adjuster member is moved in the moving direction, and provided with a complementary guide surface for forming a stretchable guide surface together with the adjuster guide surface.